

PCT/JP03/16155 (Amendments Under Article 19)

What is claimed is:

1. (Amended) A method of performing direct current pressurized sintering to powder in a mold having a cylindrical molding space, wherein, upon continuously effecting sintering while relatively moving a current portion and a sintering subject, the sintering powder material disposed in the cylindrical mold is pressurized from the end of the mold, an electrode movable in the lengthwise direction of said mold is disposed around the mold, and sintering is effected by electrifying and heating the sintering powder material.
2. (Amended) A method of performing direct current pressure sintering to powder in a mold having a cylindrical molding space, wherein, upon continuously effecting sintering while relatively moving a current portion and a sintering subject, an electrode connection terminal assembly affixed to the periphery of the mold and having a space portion capable of moving freely on a single axis is provided, and sintering is effected by the connection terminal assembly moving the current portion.
3. (Amended) A method of performing direct current pressure sintering to powder in a mold having a cylindrical molding space, wherein sintering is continuously effected while relatively moving a current portion and a sintering subject, and a material with an uneven cross section is sintered while setting the heating area.
4. (Amended) A sintering method according to claim 1 or claim 3, wherein an electrode connection terminal assembly affixed to the periphery of the mold and having a space portion capable of moving freely on a single axis is provided, and sintering is effected by the connection terminal assembly moving the current portion.

5. A sintering method according to any one of claims 1 to 4, wherein the sintering powder material is pressurized from both ends of the mold.

6. (Deleted)

7. A sintering method according to any one of claims 1 to 6, wherein the sintering powder material is sintered in one direction.

8. A sintering method according to any one of claims 1 to 7, wherein a long sintering powder material is sintered.

9. (Amended) A sintering device for performing direct current pressurized sintering to powder in a mold having a cylindrical molding space while relatively moving a current portion and a sintering subject, comprising an elevation ram capable of position control and which successively moves the mold and sintering subject, wherein a material with an uneven cross section is sintered while setting the heating area.

10. A sintering device according to claim 9, further comprising a pressurizing ram capable of load control and which pressurizes the sintering powder material disposed in the cylindrical mold from one end of the mold.

11. A sintering device according to claim 9 or claim 10, further comprising an electrode ram which presses the current electrodes disposed around the mold or performs such pressing via the current plate.

12. A sintering device according to any one of claims 9 to 11, wherein the sintering powder material is sintered in one direction.

13. A sintering device according to any one of claims 9 to 11, wherein a long sintering powder material is sintered.

14. (Deleted)